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Mario Scholz

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SMITH, GAMBRELL & RUSSELL
1130 CONNECTICUT AVENUE, N.W., SUITE 1130
WASHINGTON, DC 20036

EXAMINER

SALVITTI, MICHAEL A

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

ADVISORY ACTION

Response to Amendment

The amendments received October 14th, 2011 have been entered, since they do not require further search and/or consideration.

- The rejection of claim 9 under 35 U.S.C. § 112, first paragraph has been withdrawn in view of amendment. Organopolysiloxanes are used in the applied prior art. For example *Azechi* teaches that the claimed organopolysiloxane liquid rubbers are used therein (USPN 6,331,588; see Abstract, 1:40-45, 2:20-50, etc.).
- The rejection of claims 1-3 and 6-8 on grounds of nonstatutory obviousness-type double patenting over USPN 7,563,839 in view of *Azechi* has been withdrawn in view of approval of the Terminal Disclaimer received October 14th, 2011.

Response to Arguments

The following responses are directed to the document entitled "Remarks" (pages 4-11) received October 14th, 2011.

A) Applicant's arguments (page 4) with respect to the rejection of claim 9 have been fully considered and are persuasive, in view of the present amendment. The rejection of claim 9 has been withdrawn.

B) Applicant's arguments (page 4) with respect to the rejection of claim 5 under 35 U.S.C. § 112, fourth paragraph have been fully considered but they are not persuasive. The instant invention utilizes silanized structurally modified pyrogenic silica, which is taught to be particulate in the instant invention. The property of compacted bulk density does not appear to limit the claimed invention, because the silica is not used in bulk form in the instant claimed invention. Therefore, the rejection of claim 5 under 35 U.S.C. § 112, fourth paragraph has been maintained.

C) Applicant's arguments with respect to the rejection of claims 1-3 and 6-9 under 35 U.S.C. § 103(a) over *Azechi* (USPN 6,331,558) in view of *Scholz* (US 2003/0195290) have been fully considered but they are not persuasive.

1) On page 5, applicant argues that the instant invention, as presently claimed, produces a product having a lower viscosity, higher tear resistance and energy handling advantages.

In response, *Azechi* teaches a substantially similar composition as applicant, the difference being that *Azechi* is silent regarding the DBP value of the silica. However, the effect of DBP is known in the art to be a result-effective variable in thickening silicone rubber resins (*Scholz* ¶ [0012]). *Azechi* is concerned with the injection molding the composition (*Azechi* col. 2, lines 10-16); injection molding requires compositions that have a low viscosity. Therefore, if the DBP value is not inherent to the composition of *Azechi*, a person having ordinary skill in the art would have had motivation to substitute a silica having the claimed DBP (as taught by *Scholz*), with the motivation of decreasing the viscosity to make the resin suitable for injection molding.

2) On page 5 and the second paragraph on page 7, applicant argues that *Azechi* does not recognize the importance of the vinyl group of the surface of the destructured pyrogenic silica or the role of the low structure of the silica.

In response, *Azechi* teaches these features, as set forth in the rejection. In response to applicant's argument that *Azechi* allegedly does not recognize why certain features are important, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

In response to applicants' argument that the vinyl group is allegedly not "affixed" to the surface of *Azechi*, this argument is not found to be persuasive, because *Azechi* teaches that the surface of the silica is covered with the claimed vinyl and/or hydrophobic groups. See *Azechi* col. 5:24-6:34. The process of preparation in *Azechi* is substantially similar to process used in the instant application, and involves mixing the silica in the presence of the surface modifying agent (e.g. Example on pages 11-12 of the originally filed specification). It is the position of the Office that a preponderance of evidence has been set forth the silica of *Azechi* is "affixed" in accordance with the teachings of the originally filed specification, and that applicant has provided only argument rather than evidence to the contrary.

3) On page 7, applicant argues that *Azechi* does not mention destructured pyrogenic silica.

In response, this argument is not persuasive, because *Azechi* teaches that the silica is fumed (pyrogenic; *Azechi* 7:55-67) and is structurally modified (structural modification is taught in 5:10-23).

4) In response to applicant's argument that *Scholz* allegedly does not teach the claimed hydrophobically modified silicas, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In the instant case, *Scholz* teaches that, in the field of hydrophobically modified silica-filled liquid silicone resin compositions, a person having ordinary skill in the art recognizes that the DBP is a result effective variable in obtaining a desired viscosity of the a composition. The DBP claimed by applicant is known in the art to reduce viscosity, and a person having ordinary skill in the art would consider modifying the invention of *Azechi* by using a silica filler having the claimed DBP, with the motivation of reducing the viscosity (*Scholz* ¶ [0012]), thereby enabling *Azechi*'s goal for enabling a composition having lowered viscosity suitable for injection molding.

D) Applicant's arguments with respect to the rejection of claim 5 under 35 U.S.C. § 103(a) over *Azechi* (USPN 6,331,558) in view of *Scholz* (US 2003/0195290), and further in view of *Kobayashi* (US 2002/0077412) have been fully considered but they are not persuasive.

1) In response to applicant's argument that *Kobayashi* allegedly does not teach whether the silica is pyrogenic, destructured or densified, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In the instant case, *Kobayashi* teaches that compacted bulk densities within the claimed range are known in the art (*Kobayashi* ¶ [0023]), and are suitable for producing compositions having good flowability (*Kobayashi* ¶ [0023]). A person having ordinary skill in the art would consider substituting the silica of *Azechi* for the silica of *Kobayashi* (if the claimed density is not inherent to *Azechi*) with the motivation of ensuring flowability of the composition (*Kobayashi* ¶ [0023]), which satisfies a goal stated by *Azechi* (avoidance of unwanted thickening; 1:30-35).

E) On page 9, applicant has provided data showing that the invention of *Azechi* has a higher viscosity than the claimed invention. However, this data and argument are not persuasive on at least 3 grounds:

1) This data has not been presented in a timely fashion, and is not submitted in a 1.132 Declaration. Furthermore, it is unclear what applicant is comparing in the instant comparison. For Example, Table 1 in *Azechi* shows seven different examples, and the viscosities are measured at different points in time. Applicant has not identified which example is being compared to the instant invention.

2) It is noted from the data table that the instant invention has a viscosity of 51-55 whereas *Azechi* allegedly has a viscosity of 300-350. However, this feature is not claimed in the instant invention.

3) Assuming, *arguendo*, viscosity is the only substantial difference between *Azechi* and the instant invention, as set forth in the rejection, the DBP is a known result-effective variable responsible for viscosity; compositions with silica having a DBP within applicants' claimed range are known to have lowered viscosity. A person having ordinary skill in the art would have therefore found it to be obvious to substitute the silica of *Azechi* with a silica having applicants' presently claimed range, with the motivation of lowering the viscosity in the composition of *Azechi*, thereby increasing its utility in injection molding processes.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL SALVITTI whose telephone number is (571)270-7341. The examiner can normally be reached on Monday-Thursday 8AM-7PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1767

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/M. S./
Examiner, Art Unit 1767

/Mark Eashoo/
Supervisory Patent Examiner, Art Unit 1767